

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/848,427	05/04/2001	Juhnyoung Lee	YOR90200100207US1 7807		
7590 09/23/2005			EXAM	EXAMINER	
McGuire Woods, LLP			OYEBISI, OJO O		
McLean, VA	oulevard, Suite 1800 22102-3915		ART UNIT	PAPER NUMBER	
			3628		
		DATE MAILED: 09/23/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

	A - P - At - N	Appliantia				
	Application No.	Applicant(s)				
	09/848,427	LEE, JUHNYOUNG				
Office Action Summary	Examiner	Art Unit				
	OJO O. OYEBISI	3628				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 21 M	<u>ay 2004</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-31 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-31</u> is/are rejected.						
7)⊠ Claim(s) <u>2</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>07/09/2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.						
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D					
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)     Paper No(s)/Mail Date	5) Notice of Informal I 6) Other:	- atent Application (FTO-192)				

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-3 and 5-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The rejected claims appear to be directed to computer program. Although, the applicant recites a computer system in the preamble, but all the steps recited in the body of the claim are directed to software program.

Software, programming, instructions or code not claimed as encoded on computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in a computer. When such descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases.

Furthermore, software, programming, instructions or code not claimed as being computer executable are not statutory because they are not capable of causing functional change in a computer. In contrast, when a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer and the program, and the computer is capable

of executing the program, allowing the program's functionality to be realized, the program will be statutory.

Claims 1-3 and 5-19 are therefore rejected where there is no indication that the proposed software is recorded on computer-readable medium and/or capable of execution by a computer. The office suggests that the applicant incorporate into Claims 1-3 and 5-19 language that the proposed software is recorded on computer-readable medium and capable of execution by a computer to overcome this rejection.

## Claim Objections

3. Claim 2 is objected to because of the following informalities: The period that marks the end of claim 2 is followed by "16.". This appears to be a typographical error. Appropriate correction is required.

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-19, 23-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE LA MOTTE et al (DE hereinafter, U.S Pub No: 2003/0014318).
  Re claim 1. DE discloses a computer system for assisting to search for one or more sell bids among two or more sell bids, comprising: an initial view generator that creates an initial view of at least one sell bid on a visual interface; the at least one sell bid being represented by bid lines (see page 5, lines 0045-0047).

DE does not explicitly disclose a sell bid being represented in a Cartesian coordinate system, the bid lines intersecting with at least one attribute preference line, one or more target area modules that creates one or more target areas on the visual interface, the bid lines being located within the target area; one or more target line modules that creates one or more target lines on the visual interface, the one or more target lines being representative of values for individual attributes; and one or more winning bid list generator modules that creates one or more winning bid lists based on the one or more target lines in the one or more target areas. However, the incomplete teachings of DE can be compensated for by a well-known method in the art: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program residing in a computer system; and programming the software to manipulate bid data to display bid lines; target lines; and target areas by plotting different bids on one axes and bid attributes on another in a Cartesian coordinate system format. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., finding the intersection point of two straight lines become linked with algebraic structures. Thus, it would have been obvious to one of ordinary skill in the art to implement the well-known method steps stated supra in the

system of DE to provide a clearer analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions. Re claim 2. DE discloses the system as stated supra further comprising one or more filtering modules that executes one or more filters on the visual interface in order to change the initial view of the at least one sell bid in accordance with one or more business rules (i.e., software filters, see page 3, lines 0032-0033). Re claim 3. DE does not explicitly disclose the method as stated supra wherein the one or more target line modules allowing a visual comparison between the one or more sell bids which are closest to the one or more target lines in the one or more target areas. However, it's stated supra that sell bids can be represented by bid lines in a well-known Cartesian coordinate system, and coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., comparison between the one or more sell bids which are closest to the one or more target lines in the one or more target areas become an easy operation to one of ordinary skill in the art. Thus, it would have been obvious to one of ordinary skill in the art to represent bid lines in Cartesian coordinate using the visual interface of DE to allow for visual comparison operation as stated supra in order to present a clearer view of the object and its attributes and to facilitate efficiency in the market as a whole.

Application/Control Number: 09/848,427

Art Unit: 3628

Re claim 4. DE discloses the system as stated supra further comprising one or more central processing units (CPUs), one or more memories and one or more network interface to one or more networks associated with the one or more visual interface (see page 3, lines 0025-0026, also see page 4, lines 0036-0037).

Re claim 5. DE further discloses the system as stated supra wherein the at least one sell bid comprises one or more attributes (i.e., product characteristics see page 4, lines 0037-0038).

Re claim 6. DE further discloses the system as stated supra wherein the one or more attributes is a pair of name and value, and is grouped into categories including product specification, service specification, and supplier qualification (see page 4, lines 0037-0040).

Re claim 7. DE further discloses the system wherein the product specification includes attributes such as price (i.e., the price at which the supplier is willing to supply the product, see page 4, lines 0044-0045), material quality and properties, color and size (see page 4, lines 0037-0038, also see 6, lines 0060-0061). Re claim 8. DE further discloses the system wherein the service specification includes delivery time and cost (i.e., delivery date), and warranty (i.e., invoice terms) (see page 4, lines 0039-0040).

Re claim 9. DE further discloses the system wherein the supplier qualification includes trading history (i.e., suppliers that are registered as providing the products), experience and reputation (i.e., supplier with specified rating) (see page 4, lines 0040-0041).

Re claim 10. DE further discloses the system wherein the value range of a numeric attribute specifies lower and upper limits of desirable attribute values, and the value range of a categorical attribute specifies names that are acceptable for the category of the categories (i.e., numerical range 1-5, see page 6, lines 0063-0065).

Page 7

Re claim 11. DE further discloses the system wherein the at least one the sell bid is submitted to one or more Request for Quote (RFQ) (see abstract).

Re claim 12. DE further discloses the system wherein: the RFQ comprises one or more attributes; the one or more sell bids represents any object that has one or more attributes; and the RFQ represents any object that has one or more attributes (see abstract, also see page 3, lines 0031-0033).

Re claim 13. DE further discloses the system wherein the initial view generator module comprises one or more RFQ view generator modules (i.e., RFQ module) one or more bid view generator modules (i.e., RFQ module) (see page 4, lines 0040-0041), and one or more bid scorer modules (i.e., transaction server subsystem, see page 8, lines 0072-0073, also see page5, lines 0053-0054). Re claim 14. DE further discloses the system wherein the one or more RFQ view generator modules (i.e., RFQ module) creates one or more RFQ views of input RFQ (i.e., Typically, the transaction server subsystem includes an RFQ module configured to receive RFQ from buyers, store the RFQ in a database, and transmit the RFQ's to selected supplier terminals in the supplier network, see

page 4, lines 0040-0044).

Re claim 15. DE further discloses the system wherein the one or more bid view generator modules (i.e., RFQ module) creates one or more bid views of input sell bids (i.e., interested suppliers may prepare a quote or bid for presentation to the buyer, In the exemplary embodiment, the bid is developed through the supplier terminal for transmission to the buyer terminal via the transaction facilitator, see page lines 0040-0044).

Re claim 16. DE further discloses the system wherein the one or more bid scorer modules creates a score for each sell bid in the input set of the at least one sell bid, and ranks the at least one sell bid by score (see page 6, lines 0063-0065). Re claim 17. DE further discloses the system wherein the filtering module includes a show-top-N operation that displays the bid lines of the at least one sell bid that are ranked top N (i.e., numerical value 5) by the bid scorer module, where N is a number specified by the user (i.e., numerical value 5, see pages 6 - 7, lines 0064-0071).

Re claim 18. DE does not explicitly disclose the system wherein the one or more target area modules at least creates and modifies a region of desirable attribute value ranges in the bid view of the visual interface. However, the incomplete teaching of DE can be compensated for by simply loading bid data on to Excel/SPSS/MATLAB or any other well-known software program residing in a computer system; and programming the software as stated supra to display one or more target lines and target areas; wherein creating and modifying a region of desirable attribute value ranges become an easy operation. Thus, it would have

been obvious to one of ordinary skill in the art to implement steps stated supra in the system of DE in order to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 19. DE discloses the system of using one or more pointing device operations (i.e., PDA, laptop computer, see page3, lines 0025-0026). However, DE does not disclose the system wherein one or more target line modules creates a set of attribute values on the bid view of the visual interface. However, the incomplete teachings of DE can be compensated for by a well-known method in the art: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program in the system of DE; and programming the software to manipulate bid target lines to creates a set of attribute values on the bid view of the visual interface of DE by plotting different bids on one axes and bid attributes on another in a Cartesian coordinate system format. Thus, it would have been obvious to one of ordinary skill in the art to implement a well-known method steps stated supra in the system of DE to present a clearer view of the object and its attributes and to facilitate efficiency in the market as a whole.

Re claim 23. DE discloses an interface for assisting to search for one or more sell bids among two or more sell bids comprising: a Request for Quotes (RFQ) view that displays RFQ under consideration (see abstract, also see page 3, lines 0031-0033), and a bid view that displays in a set of sell bids submitted to the RFQ under consideration (i.e., buyers/sellers terminals, see page 4, lines 0043-0044, also see page 5, lines 45-47); one or more attribute lines that represent

Application/Control Number: 09/848,427 Page 10

Art Unit: 3628

one or more attributes specified in the RFQ and the set of sell bids (i.e., subjective and objective aspects of a product, see abstract); one or more bid lines that represent the one or more sell bids (see page 5, lines 0045-0047). DE does not explicitly disclose the bid lines being represented in the Cartesian coordinate system; one or more target areas that represent desirable attribute value ranges specified in the RFQ; and one or more target lines that represent one or more desirable attribute values specified in the bid view. However, the incomplete teaching of DE can be compensated for by a well-known method in the art: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program residing in a computer system; and programming the software to manipulate bid data to display bid lines; target lines; and target areas by plotting different bids on one axes and bid attributes on another in a Cartesian coordinate system format. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., finding the intersection point of two straight lines become linked with algebraic structures. Thus, it would have been obvious to one of ordinary skill in the art to implement the well-known method steps stated supra in the system of DE to provide a clearer analytical view of bids and their attributes

Application/Control Number: 09/848,427

Art Unit: 3628

and to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 24. DE discloses the interface wherein the RFQ view provides one or more attribute name and value range pairs (see page 7, table 1).

Re claim 25. DE further discloses the interface wherein the value range of an attribute is editable (i.e., the buyer may edit the purchase order as needed, see page 5, lines 0049-0050).

Re claim 26. DE does not explicitly disclose the interface wherein the one or more target lines permit selection of attribute values for a subset of the attributes given in the RFQ under consideration. However, the incomplete teachings of DE can be compensated for by well-known method steps: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program in the system of DE; and programming the software to manipulate bid data to display bid lines; target lines; and target areas by plotting different bids on one axes and bid attributes on another, in a Cartesian coordinate system format. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., selection of attribute values (i.e., points) for a subset of the attributes become a very easy operation. Thus, it would have been obvious to

one of ordinary skill in the art to implement the well-known method steps stated supra in the system of DE to provide a clearer analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 27. DE does not explicitly disclose the interface wherein selecting a target line of the one or more target lines results in a display of N sell bids that are closest to the target line in distance, where N is a number specified by the user. However, the incomplete teachings of DE can be compensated for by a well-known method: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program in the system of DE; and programming the software to manipulate bid data to display bid lines; target lines; and any number of specified sell bids that are in close proximity to target lines by plotting different bids on one axes and bid attributes on another, in a Cartesian coordinate system format. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since. Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., finding the intersection point of two straight lines become linked with algebraic structures. Thus, it would have been obvious to one of ordinary skill in the art to implement the well-known method steps stated supra in the

system of DE to provide a clearer analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 28. Claim 28 recites similar limitations to claim 22, and thus rejected using the same art and rationale in the rejection of claim 22.

Re claim 29. DE does not explicitly disclose the interface wherein the distance of the sell bid from the target line is a sum of the weighted distances of individual attributes divided by a normalization factor. However, the incomplete teachings of DE can be compensated for by a well-known method: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program in the system of DE; and programming the software to manipulate bid data to display bid lines/target lines; and to find the distance of the sell bids from the target lines, using same or similar approach stated supra. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., finding the distance of the sell bid from the target line using a sum of the weighted distances of individual attributes divided by a normalization factor become an easy operation. Thus, it would have been obvious to one of ordinary skill in the art to implement the wellknown method steps stated supra in the system of DE to provide a clearer

analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 30. DE further discloses the interface as stated supra further comprising: one or more attribute check-boxes (i.e., table 1) that allow a select (i.e., emphasizing) or de-select (i.e., de-emphasizing) the one or more attributes (see page 9, lines 0082-0083, also see page 8, lines 0072-0073); and one or more filters that allow to filter the bid lines displayed in the bid view (see page 3, lines 0032-0033).

Re claim 31. Claim 31 recites similar limitations to claim 20, and thus rejected using the same art and rationale in the rejection of claim 20.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE in view of Carlton-Foss (Foss hereinafter, U.S PAT: 6,647,373).

Re claim 20. DE discloses a method of assisting to search for one or more sell bids among two or more sell bids comprising the steps of: receiving a Request for Quotes (RFQ) and one or more sell bids that are submitted to the RFQ (see abstract, also see page 3, lines 0031-0033); creating one or more RFQ views on a visual interface (i.e., buyer's terminal, see page 5, lines 0045-0047); creating one or more bid views on a visual interface (i.e., supplier's terminal, see page 4, lines 0043-0044), the bid views being represented by bid lines associated with the one or more sell bids (see page 4, lines 0043-0044); creating one or more bid scores on a visual interface based on attribute values of the one or more sell bids (see page 7, table 1, also see page5, lines 0045-0047 and lines 0053-0054);

executing at least one of (i) one or more filtering operations (see page 3, lines 0032-0033), wherein the filtering operations execute one or more filters on the visual interface (see page 3, lines 0032-0033) in order to change the bid view in accordance with one or more business rules. DE does not explicitly disclose a method of executing one or more winning bid list generating operations to create one or more winning bid lists based on the executing step. Foss makes this disclosure (see col.15, lines 45-50, also col.12, lines18-20). Neither DE nor Foss discloses creating one or more bid view in a Cartesian coordinate system; executing one or more target area and target line operations; the target area operations create one or more target areas on the visual interface such that the bid lines are located within the one or more target areas, the target line operations create one or more target lines on the visual interface which allows a visual comparison between the bids lines which are closest to the one or more target lines in the one or more target areas. However, the incomplete teachings of DE and Foss can be compensated for by a well-known method in the art: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program residing in a computer system; and programming the software to manipulate bid data to display bid lines/target lines; target areas; and to perform visual comparison between bid lines which are in close proximity to target lines/target areas. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the

position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., target lines/target areas operation, and visual comparison of bid lines become an easy operation. Thus, it would have been obvious to one of ordinary skill in the art to implement the well-known method steps stated supra in the combined system of DE and Foss to provide a clearer analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 21. Neither DE nor Foss discloses the method further comprising the step of calculating a distance between the one or more target lines and a desired sell bid. However, the incomplete teachings of DE and Foss can be compensated for by a well-known method: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program in the system of DE; and programming the software to manipulate bid data to display bid lines/target lines; and to calculate the distance of the desired sell bids from the target lines. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., finding the distance between points becomes an easy operation. Thus, it would have been obvious to one of ordinary skill in the art to implement the well-known

Application/Control Number: 09/848,427

Art Unit: 3628

method steps stated supra in the combined system of DE and Foss to provide a clearer analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions.

Re claim 22. Neither DE nor Foss discloses the method wherein the distance between the desired sell bid and the one or more target lines is calculated by D.sub.i=.SIGMA..sub.jw.sub.j.vertline.a.sub.ij-a.sub.tj.vertline./N.sub.j-, and N.sub.i=max.sub.i(.vertline.a.sub.ij-a.sub.tj.vertline.) wherein D.sub.i denotes the distance of a sell bid i from the target line, w.sub.i represents a weight of attribute j. a.sub.ij and a.sub.tj denote a value of the attribute j for sell bid i and the target line, respectively. N.sub.j is a normalization factor for the attribute j. However, the incomplete teachings of DE and Foss can be compensated for by a well-known method: loading bid data on to Excel/SPSS/MATLAB or any other well-known software program in the system of DE; and programming the software to manipulate bid data to display bid lines/target lines; and to calculate the distance of the desired sell bids from the target lines using same or similar mathematical notations stated supra. Further, Cartesian coordinate system is widely used in analytical geometry providing a sense of second or third dimension of space measurement. Since, Coordinate system illustrates the connection between the position of a point and its coordinates, users can mark points, draw straight lines and read off the coordinates of different positions. Thus the geometric aspects of certain problems i.e., finding the distance between points becomes an easy operation. Thus, it would have been obvious to one of ordinary skill in the art to

implement the well-known method steps stated supra in the combined system of DE and Foss to provide a clearer analytical view of bids and their attributes and to allow buyers/suppliers to make more efficient decision in their transactions.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OJO O. OYEBISI whose telephone number is (571) 272-8298. The examiner can normally be reached on 8:30A.M-5:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HYUNG S. SOUGH can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

\*\*\*